



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,172	03/31/2004	Oswald Kuwert	BOE01 052	4481

7590 01/26/2006

DUANE MORRIS LLP
Suite 700
1667 K. Street, N.W.
Washington, DC 20006

EXAMINER

JONES, JUDSON

ART UNIT PAPER NUMBER

2834

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental
Office Action Summary

Application No.

10/813,172

Applicant(s)

KUWERT ET AL.

Examiner

Judson H. Jones

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11 and 13 is/are rejected.
- 7) ☒ Claim(s) 8-10, 12 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. 6,157,103 in view of Schiavon 4,740,737. Ohta et al. discloses an electric motor with a threaded shank 53 coupled to the rotor via thread 65 with the rotor hub 46 supported by roller bearings 50 wherein the stator core and windings are embedded as described in column 5 lines 64 to column 6 line 7 and as shown in figures 1 and 9. Ohta et al. doesn't say if the power supplied to the electric motor is DC or multiphase. Schiavon teaches in column 1 line 62 to column 2 line 2 that a multiphase motor can be used for controlling the throttle valve of a carburetor. Since Schiavon and Ohta et al. are from the same field of endeavor and since Ohta et al. does not disclose what kind of power is used for his electric motor, it would have been obvious at the time the invention was made for one of ordinary skill in the art to have utilized a multiphase power supply for the motor of Ohta et al. in order to better control the stepping motor.

In regard to claim 2, see Ohta et al. figure 1. The portion of housing 3 next to the shaft acts as a stop.

In regard to claim 3, see Ohta et al. figure 3 and the electrical connectors in the top left of the drawing.

In regard to claim 4, see Ohta et al. figure 3 elements 53 and 65.

In regard to claims 5 and 7, see Ohta et al. column 5 lines 37-45.

In regard to claim 6, see the flange portion in Ohta et al. figure 1 held by bolt 21 and see bearings 50.

In regard to claim 11, see Ohta et al. figure 1 where rotor hub 46 acts as a linear guide to accommodate the threaded shaft.

In regard to claim 13, see screw 21 attached to a flange in Ohta et al. figure 1.

Allowable Subject Matter

Claims 8-10, 12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or teach a rotor having two pole plates separated by a permanent magnet in combination with the other features of claim 8. The prior art of record does not disclose or teach a hybrid stepping motor in combination with the other features of claims 10 and 14. On pages 1 and 2 of applicant's specification hybrid stepping motors and claw tooth motors are discussed. The Ohta et al. device is a claw tooth motor as shown in figure 2. Applicant's device is a hybrid stepping motor. The limitations in claim 8 are for features present in a hybrid stepping motor. In regard to claim 12, the stopper of Ohta et al. does not interact with the linear guide.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judson H. Jones whose telephone number is 571-272-2025. The examiner can normally be reached on 8-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'JHJ', is positioned above the typed name and date.

Judson H. Jones 1/18/2006